



Grid Resilience Innovation Partnership Programs Webinar

October 6, 2022



Housekeeping

Questions?

If you have technical questions – please put them in the chat box for the host.

Please submit your questions in the chat box and reference the speaker.

Optimal Viewing



Grid Resilience Innovation Partnership (GRIP) Program



Maria Robinson

Director, Grid Deployment Office,
U.S. Department of Energy



Grid Deployment Office

Mission Statement: The Grid Deployment Office (GDO) works to provide electricity to everyone, everywhere by maintaining and investing in critical generation facilities to ensure resource adequacy and improving and expanding transmission and distribution systems to ensure all communities have access to reliable, affordable electricity.

Power Generation Assistance Division

The Power Generation Assistance Division works with existing generation facilities to ensure resilience and reliability.

Transmission Division

The Transmission Division supports innovative efforts in transmission reliability and clean energy analysis and programs, and energy infrastructure and risk analysis in support of the Administration's priorities to enhance grid resilience.

Grid Modernization Division

The Grid Modernization Division oversees activities that prevent outages and enhance the resilience of the electric grid.



Grid Resilience Funding Available through BIL

Formula Grants	Funding Amount	Next Milestones
Grid Resilience Formula Grants Preventing Outages and Enhancing the Resilience of the Electric Grid / Hazard Hardening (Sec. 40101(d))	\$2.5 billion	<ul style="list-style-type: none"> Application open until March 31st, 2023
GRIP Program	Funding Amount	Next Milestones
Grid Resilience Industry Grants Preventing Outages and Enhancing the Resilience of the Electric Grid / Hazard Hardening (Sec. 40101(c))	\$2.5 billion	<ul style="list-style-type: none"> RFI/draft FOA for utilities and industry competitive program released in August 2022. Comments due by October 14, 2022
Smart Grid Grants Deployment of Technologies to Enhance Grid Flexibility (Sec. 40107)	\$3 billion	<ul style="list-style-type: none"> RFI/draft FOA released in August 2022. Comments due by October 14, 2022
Grid Innovation Program Program Upgrading Our Electric Grid and Ensuring Reliability and Resiliency (Sec. 40103(b))	\$5 billion	<ul style="list-style-type: none"> RFI/draft FOA released in August 2022. Comments due by October 14, 2022



Grid Resilience Innovation Partnership (GRIP) Program

These programs will be released as one funding opportunity but provide opportunities for various applications to various entities including states, tribes, utilities, and industry.

- ▶ Utility & Industry Grid Resilience Grants (Competitive)
- ▶ Smart Grid Grants (Competitive)
- ▶ Grid Innovation Program (Competitive)

Request for Information (RFI) and Draft Funding Opportunity Announcement (FOA) are out now for comment. Comments due October 14, 2022

FOA release expected mid-November for FY22 and FY23 funding (~\$4.2 billion).



Timeline of Funding and Application Details

- ▶ RFI questions/comments due by October 14, 2022 at 5:00 PM ET.
 - Feedback provided will be taken into consideration, but DOE will not respond to individual submissions nor publish publicly a compendium of responses.
 - Potential applicants are **not required** to submit comments in order to receive funds.
- ▶ FOA plans to be released late Fall '22
- ▶ Application Submittal
 - DOE requests concept papers.
 - Concept papers and application must only cover one Topic Area.
 - Based on review, DOE will encourage a subset of applicants to submit a Full Application.



DOE Draft Strategy for GRIP and RFI Purpose

GRIP seeks to address:

- ▶ Transform community, regional, interregional, and national resilience, including in consideration of future shifts in generation and load
- ▶ Catalyze and leverage private sector and non-federal public capital for impactful technology and infrastructure deployment
- ▶ Advance community benefits

DOE seeks input on:

- ▶ Implementation strategy, both overall and the individual topic areas
- ▶ Approach to Community Benefits, including engagement, quality jobs, DEIA, and Justice40
- ▶ Build America, Buy America requirements



Community Benefits Plan

Applicants required to submit this framework to advance the following priorities:

- ▶ Community and Labor Engagement
- ▶ Investing in the American Workforce
- ▶ DEIA
- ▶ Justice40 Initiative



1. Competitive Utility/Industry Grid Resilience Grants

**\$2.5B Total (\$500 million/year FY 22-26)
FY22 and 23: Up to \$1 Billion**

Eligible Entities:

- ▶ Grid operators
- ▶ Storage operators
- ▶ Electricity generators
- ▶ Transmission owners or operators
- ▶ Distribution providers
- ▶ Fuel suppliers
- ▶ Others deemed eligible by the Secretary
- ▶ Capped at the amount the eligible entity has spent in the previous 3 years on hardening efforts
- ▶ Small Utility Set Aside (for those selling no more than 4 million MWh of electricity per year)
- ▶ Must match 1/3 of grant amounts received
- ▶ At least 30% must go to small utilities
- ▶ Cost Match = 100%

Prioritize projects generating the greatest community benefit in reducing the likelihood and consequences of disruptive events.



Resilience investments allowed under Competitive Grant

Grantees must address at least three of the requirements:

- utility pole management,
- hardening of power lines, facilities, substations, of other systems,
- undergrounding of electrical equipment,
- replacement of old overhead conductors and underground cables,
- relocation of power lines or reconductoring of power lines with low-sag, advanced conductors,
- vegetation and fuel-load management,
- weatherization technologies and equipment,
- fire-resistant technologies and fire prevention systems,
- monitoring and control technologies,
- use or construction of distributed energy resources for enhancing system adaptive capacity during disruptive events, including microgrids, and battery-storage subcomponents,
- adaptive protection technologies, and
- advanced modeling technologies

Resilience measures that are **NOT** allowed under this provision include:

Construction of a new - electric generating facility; or large-scale battery-storage facility that is not used for enhancing system adaptive capacity during disruptive events; or cybersecurity.



2. Smart Grid Grants

**\$3B total (\$600 million/year FY 22-26)
FY22 and 23: Up to \$1.2 Billion**

- **Grants to support the deployment of technologies to enhance grid flexibility**
- **Open Eligibility**
 - Institutions of higher education;
 - For-profit entities;
 - Non-profit entities;
 - State and local governmental entities, and tribal nations.
- **Cost Share: At least 50% of grant**

Goals & Objectives:

- **Increase Transmission Capacity**
 - Grid Enhancing Technologies
- **Mitigate Wildfires**
 - Asset Management Technologies
- **Load Management/Electrification of “edge devices”**
 - Managed Charging/Grid Infrastructure and autonomous control
- Incorporate **Secure Communications/Cybersecurity**

The Smart Grid Investment Grant (SGIG) program was previously funded under the Recovery Act, which awarded \$3.5 Billion of grants during FY 2009 & 2010 for activities through FY 2015.



2. Smart Grid Grant Priority Investment Areas

- ***Increasing transmission capacity and operational transfer capacity***
 - Grid enhancing technologies such as dynamic line rating, flow control devices, advanced conductors, and network topology optimization, to improve system efficiency and reliability.
- ***Improving the visibility of the electrical system to grid operators***
 - Help quickly rebalance the electrical system with autonomous controls through data analytics, software, and sensors.
- ***Enhance secure communication and data flow between distribution components:***
 - Investments in optical ground wire, dark fiber, operational fiber, and wireless broadband communications networks.
- ***Aggregation and integration of distributed energy resources and other “grid-edge” devices to***
 - Provide system benefits, such as renewable energy resources, electric vehicle charging infrastructure, vehicle-to-grid technologies and capabilities, and smart building technologies.
- ***Enhancing interoperability and data architecture of systems that support two-way flow of both electric power and localized analytics to provide information between electricity system operators and consumers.***
- ***Anticipate and mitigate the impacts of extreme weather or natural disaster on grid resiliency***
 - Investments to increase the ability to redirect or shut of power to minimize blackouts, prevent wildfires, and avoid further damage.



3. Grid Innovation Program

**\$5B Total (\$1 billion/year for FY22–26)
FY22 and 23: Up to \$2 Billion**

- ▶ Demonstrate innovative approaches to transmission, distribution, and storage to harden and enhance resilience and reliability; and
- ▶ Demonstrate new approaches to enhance regional grid resilience implemented through States by public and rural electric cooperative entities on a cost-shared basis

Eligible Entities:

- ▶ a State;
- ▶ a combination of 2 or more States;
- ▶ an Indian Tribe;
- ▶ a unit of local government;
- ▶ a public utility commission

Cost Share: 50% Minimum



3. Grid Innovation Program (continued)

Primary Objectives:

- ▶ Ensure reliable grid operations
- ▶ Improve overall grid resilience
- ▶ Enhance collaboration between and coming eligible entities and private and public sector owners and operators on grid resilience
- ▶ Contribute to the decarbonization of the electricity and broader energy system
- ▶ Provide enhanced system value, improve current and future system cost-effectiveness and deliver economic benefits

Areas of Interest for Applications:

- ▶ Transmission capacity enhancements
- ▶ Advanced distribution grid assets and functionality
- ▶ Combined systems demonstrating innovative approaches



Current Status & Timeline of Funding

RFI open for comment 8/30/22 – 10/14/22

- ▶ RFI questions/comments due by October 14, 2022 at 5:00 PM ET. Email to GDORFI@hq.doe.gov
- ▶ Feedback provided will be taken into consideration, but DOE will not respond to individual submissions nor publish publicly a compendium of responses.
- ▶ FOA plans to be released late Fall '22
 - Grid Resilience Utility & Industry Competitive Grants – 40101(c)
 - Smart Grid Grants – 40107
 - Grid Innovation Program – 40103(b)



FAQs

- **If an eligible entity does not apply in a given year, can they apply in future years?**
 - Yes
- **What if funds for a program in a fiscal year are not used, including for small utility set-asides?**
 - Funds will rollover year to year if not fully used
- **How will the Justice40 initiative be applied?**
 - DOE will review applications to see how the benefits will flow to disadvantaged communities, and how negative environmental impacts affecting disadvantaged communities would be mitigated.
 - Applicants will be required to submit a Community Benefits Plan that demonstrates how the project will (1) support meaningful community and labor engagement; (2) invest in America's workforce; (3) advance diversity, equity, inclusion, and accessibility; and (4) contribute to the goal that 40% of the overall project benefits flow to disadvantaged communities (the Justice40 Initiative).



Learn More about the Grid Deployment Office

The Grid and Transmission Programs Conductor acts as a clearinghouse for GDO's transmission and grid resilience financing programs

Find information on Grid and Transmission programs within:

- ▶ Bipartisan Infrastructure Act
- ▶ Inflation Reduction Act
- ▶ And other existing DOE transmission and grid programs

<https://www.energy.gov/gdo/conductor>

Grid and Transmission Programs Conductor

Grid Deployment Office

Grid Deployment Office » Grid and Transmission Programs Conductor

The Grid and Transmission Programs Conductor acts as a clearinghouse for GDO's transmission and grid resilience financing programs made available through President Biden's Bipartisan Infrastructure Act and Inflation Reduction Act, as well as other existing DOE transmission and grid programs.

The Conductor's goal is to provide resources and open lines of communication to maximize the effectiveness of these programs and work with state and local governments, tribes and territories, utility and industry partners, and other stakeholders to catalyze the development of a resilient, modern grid and transmission infrastructure for a reliable, affordable, and clean energy future.

Programs Summary

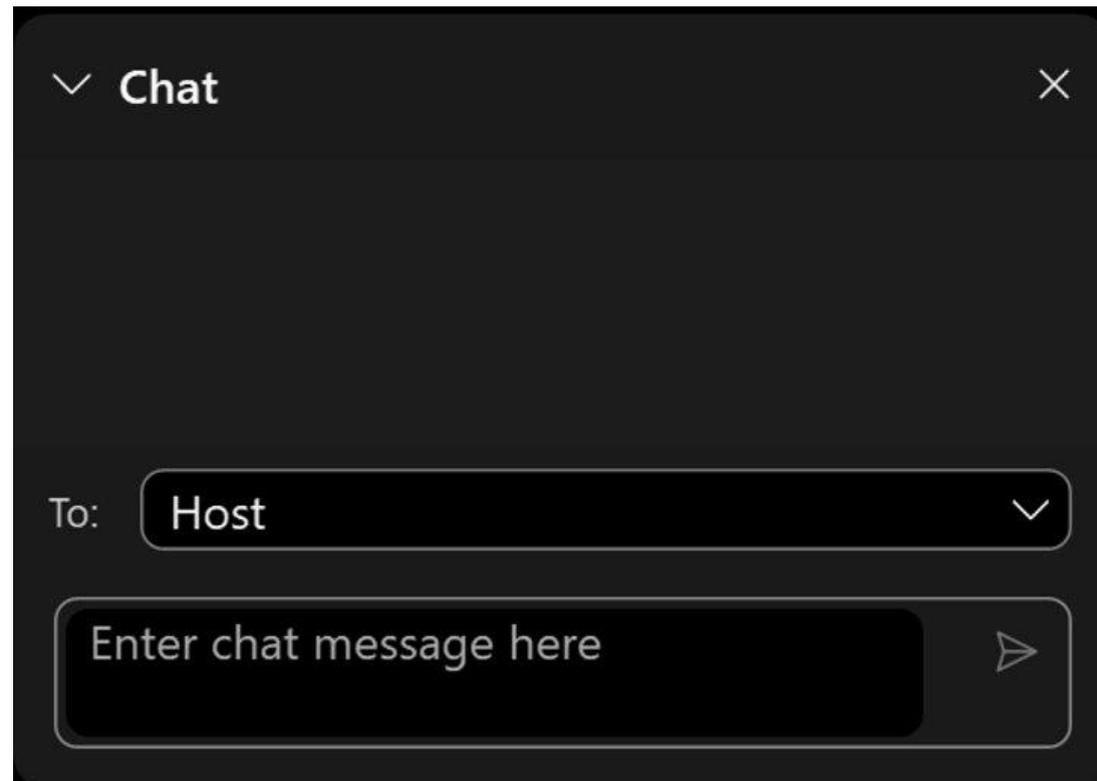
	SOLICITATION	FUNDING MECHANISM	NEXT STEPS
TRANSMISSION FACILITATION PROGRAM	Open Fall 2022	Capacity Contracts	Solicitation for loans, public private partnerships, and additional capacity contracts in Spring 2023
GRID RESILIENCE FORMULA GRANTS - 4010(D)	Opened on July 6, 2022, and closes March 31, 2023.	Formula grant funds disbursed on a rolling basis	TBD
GRID RESILIENCE & INNOVATION PARTNERSHIPS (GRIP)	RFI ¹ and Draft FOA ² open for comment August 30, 2022 - October 14, 2022 Funding Opportunity open Fall 2022 <ul style="list-style-type: none"> • Grid Resilience Utility & Industry Competitive Grants - 40101(c) • Grid Innovation Program - 40103(D) • Smart Grid Grants - 40107 	Grants and Financial Assistance	TBD
LOAN PROGRAMS OFFICE TRANSMISSION LOANS	Open for Applications	Loans	
WESTERN AREA POWER ADMINISTRATION TRANSMISSION INFRASTRUCTURE PROGRAM	Open for Applications	Loans	
TRANSMISSION FACILITY LOANS (INFLATION REDUCTION ACT)	Check back November 2022 for additional information.		

View the Grid and Transmission Programs [Conductor Guide](#) and [Briefing Deck](#) for more information about eligibility and application requirements and funding opportunity or grant timelines.

If you have additional questions, please reach out to us at Transmission@hq.doe.gov and we will get back to you as quickly as possible.

Questions?

Please submit your questions in the chat box.



A screenshot of a chat interface. At the top left, there is a dropdown arrow and the word "Chat". At the top right, there is a close button (X). Below this, there is a "To:" label followed by a dropdown menu showing "Host" and a downward arrow. Below that is a text input field with the placeholder text "Enter chat message here" and a send button (paper plane icon) on the right.



Contact Us



www.energy.gov/gdo/join-our-team



GDORFI@hq.doe.gov